



Food and Drug Administration  
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February 12, 2015

YTY Industry (Manjung) SDN. BHD.  
Ms. Punitha Samy, Assistant Manager DC/RA  
Lot 1422-1424, Batu 10 Lekir  
Sitiawan, Perak Darul Ridzuan  
Malaysia 32020

Re: K143055

Trade/Device Name: Non-Sterile, Powder Free Scented Blue Nitrile Examination Gloves –  
Grape, Apple, Peppermint, Vanilla  
Regulation Number: 21 CFR 880.6250  
Regulation Name: Patient Examination Glove  
Regulatory Class: I  
Product Code: LZA  
Dated: January 2, 2015  
Received: January 8, 2015

Dear Ms. Samy:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration. Please note: CDRH does not evaluate information related to contract liability warranties. We remind you, however, that device labeling must be truthful and not misleading.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); medical device reporting (reporting of medical device-related adverse events) (21 CFR 803); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address <http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm>. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to <http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm> for the CDRH's Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address <http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm>.

Sincerely yours,

*Tejashri Purohit-Sheth, M.D.*

Tejashri Purohit-Sheth, M.D.  
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Dental Devices  
Office of Device Evaluation  
Center for Devices and  
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Enclosure

**Indications for Use**

510(k) Number (if known)

K143055

Device Name

NON-STERILE, POWDER FREE SCENTED BLUE NITRILE EXAMINATION GLOVES  
- GRAPE, APPLE, PEPPERMINT, VANILLA

Indications for Use (Describe)

A patient examination gloves is a disposable device intended for medical purpose that is worn on the examiner's hand or fingers to prevent contamination between patient and examiner.

Type of Use (Select one or both, as applicable)

☐ Prescription Use (Part 21 CFR 801 Subpart D)

☒ Over-The-Counter Use (21 CFR 801 Subpart C)

**CONTINUE ON A SEPARATE PAGE IF NEEDED.**

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# YTY INDUSTRY (MANJUNG) SDN BHD

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K143055

## 510 (K) SUMMARY SHEETS

### 1.0

### 510 (K) SUMMARY

### 2.0

Submitter

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Date Summary Prepared

February 12, 2015

### 3.0

#### Name of Device

Trade Name: Non-Sterile, Powder Free Scented Blue Nitrile Examination Gloves –  
Grape, Apple, Peppermint, Vanilla

Common Name: Nitrile Examination Gloves

Classification Name: Patient examination glove

Device Classification: I

Regulation Number: 21 CFR 880.6250

Panel: General Hospital (80)

Product Code: LZA

### 4.0

#### Identification of The Legally Marketed Devices

Predicate Device Name: Non-Sterile, On Line Powder Free Nitrile Blue & White Color  
Examination Gloves

Predicate 510(K) number: K052502.

Manufacturer's Name: YTY Industry (Manjung) Sdn Bhd  
Lot 1422-1424, Batu 10 Lekir, 32020 Sitiawan, Perak Darul Ridzuan

## 5.0 Description of The Device

Non-Sterile, Powder Free Scented Blue Nitrile Examination Gloves – Grape, Apple, Peppermint, and Vanilla meets all the current specifications listed under the ASTM Specification D6319-10, Standard Specification for Nitrile Examination Gloves for Medical Application. The principle operation and mechanism of this device is to prevent contamination between patient and examiner and this principle is achieved through testing of barrier, physical properties and other testing stated in the performance data. This device is for over-the counter single use.

## 6.0 Indications for Use

A patient examination gloves is a disposable device intended for medical purpose that is worn on the examiner's hand or finger to prevent contamination between patient and examiner. This device is for over-the counter use.

## 7.0 Summary of the Technological Characteristic of the Device compared to the Predicate Device for substantial equivalent discussion

There is no difference in technology characteristic compared to the predicate device. Gloves are made from nitrile latex compound. Non-sterile, Powder Free Scented Blue Nitrile Examination Gloves have the below technological characteristic compared to ASTM or Equivalent standards.

Characteristic	Standards	Performance of Non-Sterile, Powder Free Scented Blue Nitrile Examination Gloves
Dimension	ASTM D6319-10	Meets
Physical Properties	ASTM D6319-10	Meets
Freedom from holes	ASTM D6319-10	Meets
Powder-free	ASTM D6319-10	Meets
Bio-compatibility	Primary skin irritation ISO 10993-10	Non-Irritant
	Dermal Sensitization ISO 10993-10	Non-sensitizer

**Performance data of gloves based on ASTM D6319-10 and FDA 1000ML water leak test.**

Test	FDA 1000ml Water Leak Test	YTY Powder Free Nitrile Examination Gloves				Non-Sterile On Line Powder Free Nitrile Blue & White Color Examination Glove
		Blue- Grape	Blue- Apple	Blue- Peppermint	Blue- Vanilla	Predicate K052502
1. Watertight (1000ml) ASTM D5151-06 (2011)	Multiple Normal GII AQL = 2.5	Holes found: 0 (Accept 1, Reject 7)	Holes found: 0 (Accept 1, Reject 7)	Holes found: 0 (Accept 1, Reject 7)	Holes found: 0 (Accept 1, Reject 7)	Holes found: 0 (Accept 1, Reject 7)
Test ASTM D6319-10	ASTM D6319-10					
2. Length (mm) Size M	Min 230	240-243	240-249	240-249	240-251	240-251
3. Palm width (mm) Size M	95 ± 10	95-99	95-99	95-99	94-96	94-96
4. Thickness (mm) (Single Layer)						
Finger	Min 0.05	0.10-0.14	0.10-0.14	0.11-0.14	0.11-0.14	0.15-0.19
Palm	Min 0.05	0.07-0.08	0.07-0.08	0.07-0.08	0.08-0.09	0.12-0.16
5. Physical Properties						
Before Aging Tensile Strength (MPa)	Min 14	25.70- 29.83	25.99- 28.39	24.11-28.98	24.54- 30.14	26.00-30.00
Ultimate Elongation (%)	Min 500	520-580	520-580	520-580	540-580	750-800
After Aging Tensile Strength (MPa)	Min 14	27.76- 31.67	28.39- 31.61	26.53-30.77	29.25- 32.35	25.00-28.00
Ultimate Elongation (%)	Min 400	460-500	460-500	440-500	460-480	670-730
6. Residual Powder ASTM-D6124-10 (Reapproved 2011)	Max 2.0mg/glove	0.16mg/ glove	0.10mg/ glove	0.12mg/ glove	0.12mg/ glove	0.20%/ glove
7. Biocompatibility Primary Skin Irritation Dermal Sensitization	ISO 10993- 10 Non-irritant Non- sensitizer	Under the conditions of the study, the device is non-irritant or non- sensitizer	Under the conditions of the study, the device is non-irritant or non- sensitizer	Under the conditions of the study, the device is non-irritant or non- sensitizer	Under the conditions of the study, the device is non-irritant or non- sensitizer	Non-irritant Non-sensitizer

## 8.0 Substantial Equivalence Comparison Table with Predicate Device, K052502

Characteristics	Applicant				Predicate K052502	Medical Glove Manual (1661)
	Blue - Grape	Blue - Apple	Blue - Peppermint	Blue - Vanilla		
Company Name	YTY Industry (Manjung) Sdn Bhd				YTY Industry (Manjung) Sdn Bhd	FDA
Product Name	Non-Sterile, Powder Free Scented Blue Nitrile Examination Gloves				Non-Sterile, On Line Powder Free Nitrile Blue & White Color Examination Gloves	Patient Examination Gloves
Product Code	LZA				LZA	LZA – (Polymer – other than Vinyl (includes Nitrile, Polyurethane, etc.))
Indication for Use	A patient examination gloves is a disposable device intended for medical purpose that is worn on the examiner’s hand or fingers to prevent contamination between patient and examiner.				This is a medical glove to be worn on the hand of health care and similar personnel to prevent contamination between health care personnel and the patient.	<b>Powder-Free Examination Gloves</b> A powder-free patient examination glove is a disposable device intended for medical purposes that is worn on the examiner's hand or finger to prevent contamination between patient and examiner.
Device Description	Non-Sterile, Powder Free Scented Blue Nitrile Examination Gloves meets all the current specifications listed under the ASTM Specification D6319-10, Standard Specification for Nitrile Examination Gloves for Medical Application. This device is for over-the counter single use.				Class 1 Nitrile Patient Examination Glove 80 LZA, powder free that meets all requirements of ASTM Standard D6319-00a <sup>e3</sup> and FDA water leak test.	This gloves meet all current specifications listed under ASTM specifications D6319-10
Over the Counter Use	This device is for over-the counter single use.				This device is for over-the counter single use.	Indication for use
Use	Single Use				Single Use	Directions for use
Non Sterile or Sterile	Non Sterile				Non Sterile	Sterilization
Powder Free	Powder Free				Powder Free	Process & Attribute labeling
Compare materials						
Materials	Carboxylated Butadiene Acrylonitrile				Carboxylated Butadiene Acrylonitrile	LZA – (Polymer – other than Vinyl (includes Nitrile, Polyurethane, etc.))

Characteristics	K143055				Predicate K052502	Medical Glove Manual (1661)
	Blue - Apple	Blue - Grape	Blue - Peppermint	Blue - Vanilla		
Company Name	YTY Industry (Manjung) Sdn Bhd				YTY Industry (Manjung) Sdn Bhd	
<b>Specifications and Performance</b>	Dimension: Finger & Palm Thickness min: 0.05mm Physical Properties: Min 14MPa Before and After Aging Barrier: AQL 2.5					Current gloves meet ASTM D6319-10 Nitrile gloves
Tensile Strength before aging (MPa)	25.70-29.83	25.99-29.83	24.11-28.98	24.54-30.15	26.00-30.00	ASTM D6124-06 (Reapproved 2011) Residual Powder  ASTM D5151-06 (Reapproved 2011) Detection of Holes in Medical Gloves
Tensile Strength after aging (MPa)	27.76-31.67	28.39-31.61	26.53-30.77	29.25-32.35	25.00-28.00	
Ultimate Elongation before aging (%)	520-580	520-580	520-580	540-580	750-800	
Ultimate Elongation after aging (%)	460-500	460-500	440-500	460-480	670-730	
Dimensions Length (mm)	240-243	240-249	240-249	240-251	240-251	
Dimensions Width (mm)	95-99	95-99	95-99	96-99	94-96	
Thickness Finger (mm)	0.10-0.14	0.11-0.14	0.11-0.14	0.11-0.14	0.15-0.19	
Thickness Cuff (mm)	0.06	0.06	0.06-0.07	0.07-0.08	0.09-0.10	
Thickness Palm (mm)	0.07-0.08	0.07-0.08	0.07-0.08	0.08-0.09	0.12-0.16	
AQL	AQL 2.5 Result: 0	AQL 2.5 Result: 0	AQL 2.5 Result: 0	AQL 2.5 Result: 0	AQL 2.5 Result: 0	
Residual Powder (mg/glove)	0.16	0.10	0.16	0.12	0.20	
Size	M	M	M	M	M	
Bio-compatibility	Under the condition of the study the device is non-irritant and non-sensitizer	Under the condition of the study the device is non-irritant and non-sensitizer	Under the condition of the study the device is non-irritant and non-sensitizer	Under the condition of the study the device is non-irritant and non-sensitizer	Non-irritant Non-sensitizer	ISO 10993-10 Test for Irritation and Skin Sensitization
Labeling for legally marketed predicate	-Powder Free -devices color -Scent -Patient Examination Glove -Non sterile -Single Use Only -Manufactured for -Lot -Intended use				-Powder Free -devices color: Clear (Blue) -Patient Examination Glove -Non sterile -Single Use Only -Manufactured for: -Lot	Chapter 4 - Labeling



## **9.0 Conclusion**

The conclusions drawn from the non-clinical tests demonstrate that the device, Non-Sterile, Powder Free Scented Blue Nitrile Examination Gloves – Grape, Apple, Peppermint and Vanilla and the predicate device is substantially equivalent based on intended uses, physical properties, technological characteristics and non-clinical performance.